WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 - 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475 • www.wvdep.org

APPLICATION FOR GENERAL PERMIT REGISTRATION

CONSTRUCT, MODIFY, RELOCATE OR ADMINISTRATIVELY UPDATE A STATIONARY SOURCE OF AIR POLLUTANTS

PLEASE CHECK ALL THAT APPLY (IF KNOWN):
■ **CONSTRUCTION** □ **MODIFICATION** □ **RELOCATION**
□ **ADMINISTRATIVE UPDATE** □ **AFTER-THE-FACT**
□ **TEMPORARY PERMIT**

FOR AGENCY USE ONLY: *PLANT I.D. #* _____

PERMIT # _____ *PERMIT WRITER:* _____

CHECK WHICH TYPE OF GENERAL PERMIT REGISTRATION YOU ARE APPLYING FOR:

- □ **G10-C** – Coal Preparation and Handling
- □ **G20-B** – Hot Mix Asphalt
- □ **G30-D** – Natural Gas Compressor Stations
- □ **G33-A** – Class I Spark Ignition Internal Combustion Engine
- □ **G35-A** – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit)
- ■ **G40-C** – Nonmetallic Minerals Processing
- □ **G50-B** – Concrete Batch
- □ **G60-C** - Class II Emergency Generator
- □ **G65-C** – Class I Emergency Generator

SECTION I. GENERAL INFORMATION

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE): **ALLEY TRUCKING LLC**

2. FEDERAL EMPLOYER ID NO. **(FEIN):** 61-1381490

3. APPLICANT'S MAILING ADDRESS: **123 LITTLE MUD LICK, BELFRY, KY 41514**

4. IF APPLICANT IS A SUBSIDIARY CORPORATION, PLEASE PROVIDE THE NAME OF PARENT CORPORATION:

5. **WV BUSINESS REGISTRATION.** IS THE APPLICANT A RESIDENT OF THE STATE OF WEST VIRGINIA? ■ **YES** □ **NO**

➪ IF **YES,** PROVIDE A COPY OF THE **CERTIFICATE OF INCORPORATION / ORGANIZATION / LIMITED PARTNERSHIP** (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS **OR** OTHER ***BUSINESS CERTIFICATE*** AS **ATTACHMENT A.**

➪ IF **NO,** PROVIDE A COPY OF THE **CERTIFICATE OF AUTHORITY / AUTHORITY OF L.L.C. / REGISTRATION** (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS **OR** OTHER ***BUSINESS CERTIFICATE*** AS **ATTACHMENT A .**

SECTION II. FACILITY INFORMATION

7. TYPE OF PLANT OR FACILITY (STATIONARY SOURCE) TO BE CONSTRUCTED, MODIFIED, RELOCATED OR ADMINISTRATIVELY UPDATED (E.G., COAL PREPARATION PLANT, PRIMARY CRUSHER, ETC.) :

Permit for rock crusher and screening plant

8. STANDARD INDUSTRIAL CLASSIFICATION **(SIC)** CODE FOR THE FACILITY:

1422

Date of Last Application Revision 04/17/2012

9A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY:	10A. LIST ALL CURRENT 45CSR13 AND 45CSR30 (TITLE V) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR EXISTING FACILITY ONLY):
Pending	**none**

PRIMARY OPERATING SITE INFORMATION

11A. NAME OF PRIMARY OPERATING SITE:	12A. MAILING ADDRESS OF PRIMARY OPERATING SITE:
Logan County Plant	**SAME AS ABOVE**

13A. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE *PROPOSED SITE*?

☒ **YES** ☐ **NO**

➪ IF YES, PLEASE EXPLAIN: **Lease and Contract with property owner (Coal Mac)**

➪ IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

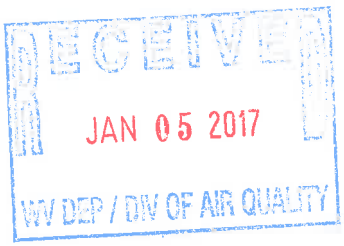
14A. ➪ FOR **MODIFICATIONS or ADMINISTRATIVE UPDATES,** AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE *PRESENT LOCATION* OF THE FACILITY FROM THE NEAREST STATE ROAD;

➪ FOR **CONSTRUCTION OR RELOCATION PERMITS**, PLEASE PROVIDE DIRECTIONS TO *THE PROPOSED NEW SITE LOCATION* FROM THE NEAREST STATE ROAD.

First site - From Logan, proceed on US119S to 22 Mountain Road, continue over mountain along tracks to entrance of surface mine – guard shack on right hand side of Pine Creek Road.

INCLUDE A **MAP** AS **ATTACHMENT F.**

15A. NEAREST CITY OR TOWN:	16A. COUNTY:	
Holden	**Logan**	
17A. UTM NORTHING (KM):	18A. UTM EASTING (KM):	19A. UTM ZONE:
4178.30060	**404.51717**	**17**



1ST ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only)

11B. NAME OF PRIMARY OPERATING SITE:	12B. MAILING ADDRESS OF PRIMARY OPERATING SITE:
SURFACE MINE	

13B. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE *PROPOSED SITE*?

■ **YES** ☐ **NO**

⇨ IF **YES**, PLEASE EXPLAIN: **Lease and contract with property owner (Mingo Logan Coal)**

⇨ IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14B. ⇨ FOR **MODIFICATIONS or ADMINISTRATIVE UPDATES,** AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE *PRESENT LOCATION* OF THE FACILITY FROM THE NEAREST STATE ROAD;

⇨ FOR **CONSTRUCTION OR RELOCATION PERMITS**, PLEASE PROVIDE DIRECTIONS TO *THE PROPOSED NEW SITE LOCATION* FROM THE NEAREST STATE ROAD.

From Logan, Take Route 17 North toward Sharples, WV pass Mingo Logan Prep Plant – continue on Route 17 to entrance to Spruce Surface Area – guard shack on left

INCLUDE A **MAP** AS **ATTACHMENT F**.

15B. NEAREST CITY OR TOWN:	16B. COUNTY:	
Sharples	**Logan**	
17B. UTM NORTHING (KM):	18B. UTM EASTING (KM):	19B. UTM ZONE:
4193.32918	**430.41396**	**17**

2ND ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only)

11C. NAME OF PRIMARY OPERATING SITE:	12C. MAILING ADDRESS OF PRIMARY OPERATING SITE:

13C. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE *PROPOSED SITE*?

☐ **YES** ☐ **NO**

➪ IF **YES**, PLEASE EXPLAIN: _____

➪ IF **NO**, **YOU** ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14C. ➪ FOR **MODIFICATIONS or ADMINISTRATIVE UPDATES,** AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE *PRESENT LOCATION* OF THE FACILITY FROM THE NEAREST STATE ROAD;

➪ FOR **CONSTRUCTION OR RELOCATION PERMITS**, PLEASE PROVIDE DIRECTIONS TO *THE PROPOSED NEW SITE LOCATION* FROM THE NEAREST STATE ROAD.

INCLUDE A **MAP** AS **ATTACHMENT** F.

15C. NEAREST CITY OR TOWN:	16C. COUNTY:	
17C. UTM NORTHING (KM):	18C. UTM EASTING (KM):	19C. UTM ZONE:

20. PROVIDE THE DATE OF ANTICIPATED INSTALLATION OR CHANGE: **January 15, 2017** ➪ IF THIS IS AN **AFTER-THE-FACT** PERMIT APPLICATION, PROVIDE THE DATE UPON WHICH THE PROPOSED CHANGE DID HAPPEN: ____/____/____	21. DATE OF ANTICIPATED START- UP IF REGISTRATION IS GRANTED: **January 15, 2017**

22. PROVIDE MAXIMUM PROJECTED **OPERATING SCHEDULE** OF ACTIVITY/ ACTIVITIES OUTLINED IN THIS APPLICATION:

HOURS PER DAY **8** DAYS PER WEEK **5** WEEKS PER YEAR **40** PERCENTAGE OF OPERATION **100%**

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

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WVDAQ Registration Application

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Section B	**Process Description**
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Section N	**Equipment Specs**

WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
ALLEY TRUCKING LLC
123 LITTLE MUD LICK
BELFRY, KY 41514-7301

BUSINESS REGISTRATION ACCOUNT NUMBER: **1050-0184**

This certificate is issued on: **06/9/2011**

This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

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L0670620800

ATTACHMENT B

PROCESS DESCRIPTION

Rock from adjacent overburden areas will be transferred to BS-01(PW) by front end loader @ TP-01(UD-PW); go to belt conveyor BC-01(NC) @ TP-02(TC-PE); and transfer to screen SS-01(PW) @ TP-03(TC-PW). The screen will discharge material by size to two separate stockpiles OS-01(SW-WS) and OS-02(SW-WS) via belt conveyors BC-02(NC) and BC-03(NC) @ TP-04(TC-FE) thru TP-08(TC-MDH). The screen will transfer to belt conveyor BC-04(NC) @ TP-10(TC-FE) and feed bin BS-02(PW) @ TP-11(TC-PW). From BS-02, material will transfer to BC-05(NC) @ TP-12(TC-PE) to the crusher CR-01(FE) @ TP-13(TC-FE). The material will be crushed and discharged to stockpiles OS-03(SW-WS), OS-04(SW-WS), OS-05(SW-WS) according to size via belt conveyors BC-06(NC), BC-07(NC), and BC-08(NC) @ TP-14(TC-FE) thru TP-21(LO-MDH). Material will be loaded to truck for distribution on mine site at TP-06(LO-MDH), TP-09(LO-MDH), TP-16(LO-MDH), TP-18(LO-MDH), and TP-22(LO-MDH).

Alley Trucking owns the J-1160 Crusher and is trying to negotiate a contract for the Powerscreen at this time.

Company officials have agreed to install a portable water spray system to control fugitive emissions as required by the General Permit Program.

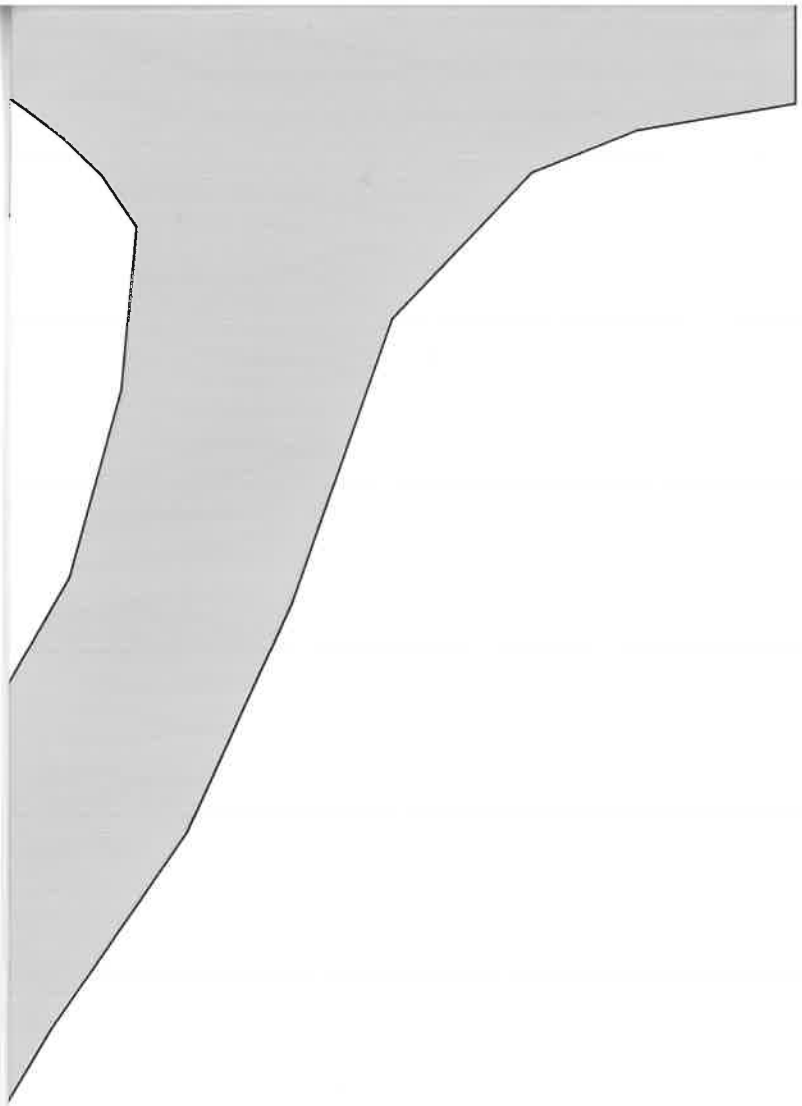
No Certificate of Conformity is available.

ATTACHMENT C

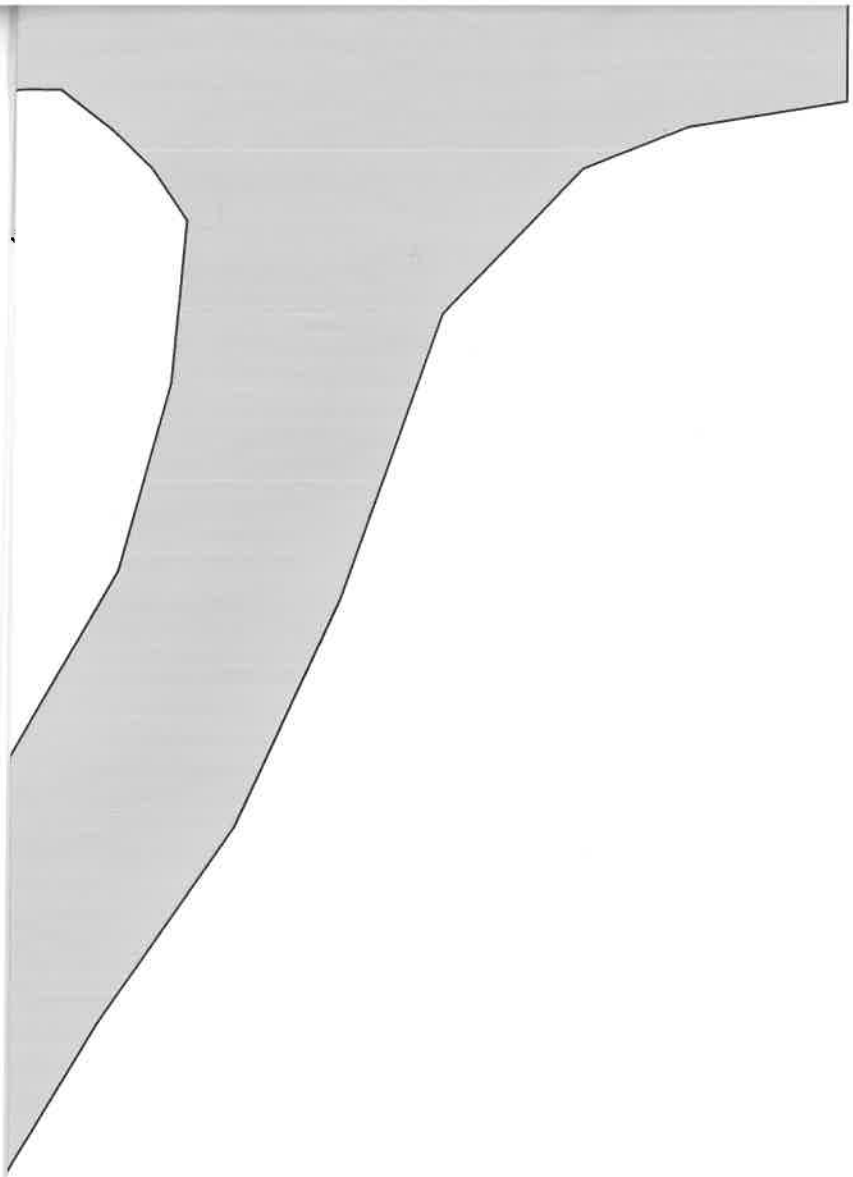
DESCRIPTION OF FUGITIVE EMISSIONS

Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on unpaved haulroads and work areas. The haulroads and work areas will be controlled by water truck. The water truck will be operated three times daily, and more as needed in dry periods.

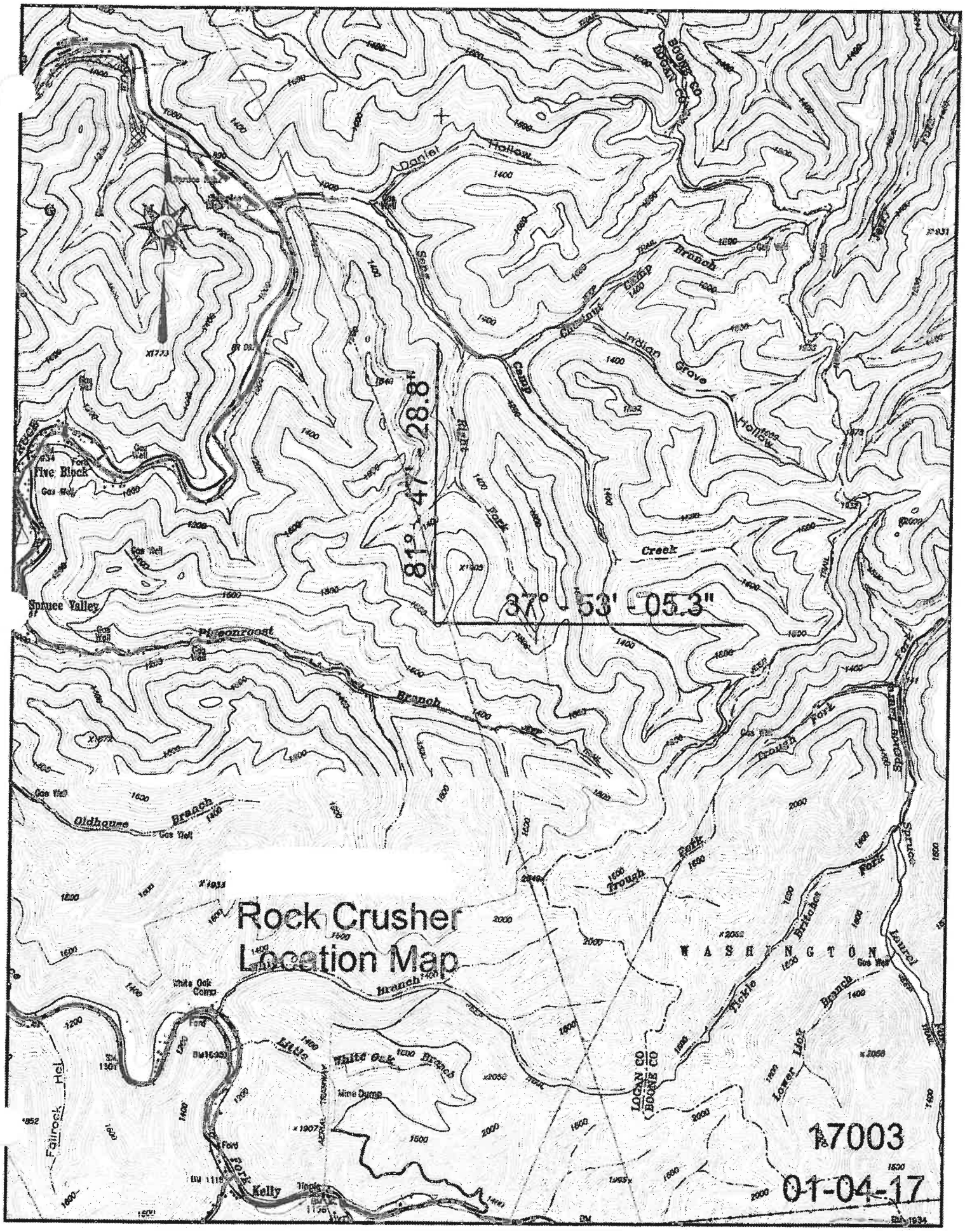
An additive to prevent freezing will be utilized in the winter months when freezing conditions are present. New course gravel base material will be added to unpaved haulroads as needed.



ALLEY TRUCKING LLC
ROCK CRUSHER/SCREENING PLANT
MATERIAL FLOW DIAGRAM



ALLEY TRUCKING LLC
ROCK CRUSHER/SCREENING
PLANT
SITE PLAN


Rock Crusher
Location Map
81° 47' 28.8"
37° 53' 05.3"
17003
01-04-17

Lon/Lat

Longitude: - 81 d 47 m 28.8 s

Latitude: + 37 d 53 m 05.3 s

DD: -81.791333 37.884806

Datum: NAD27 NAD83

Convert

UTM

Coordinates: 430413.96 E 4193329.18 N

Datum: NAD27 NAD83 Zone: 17

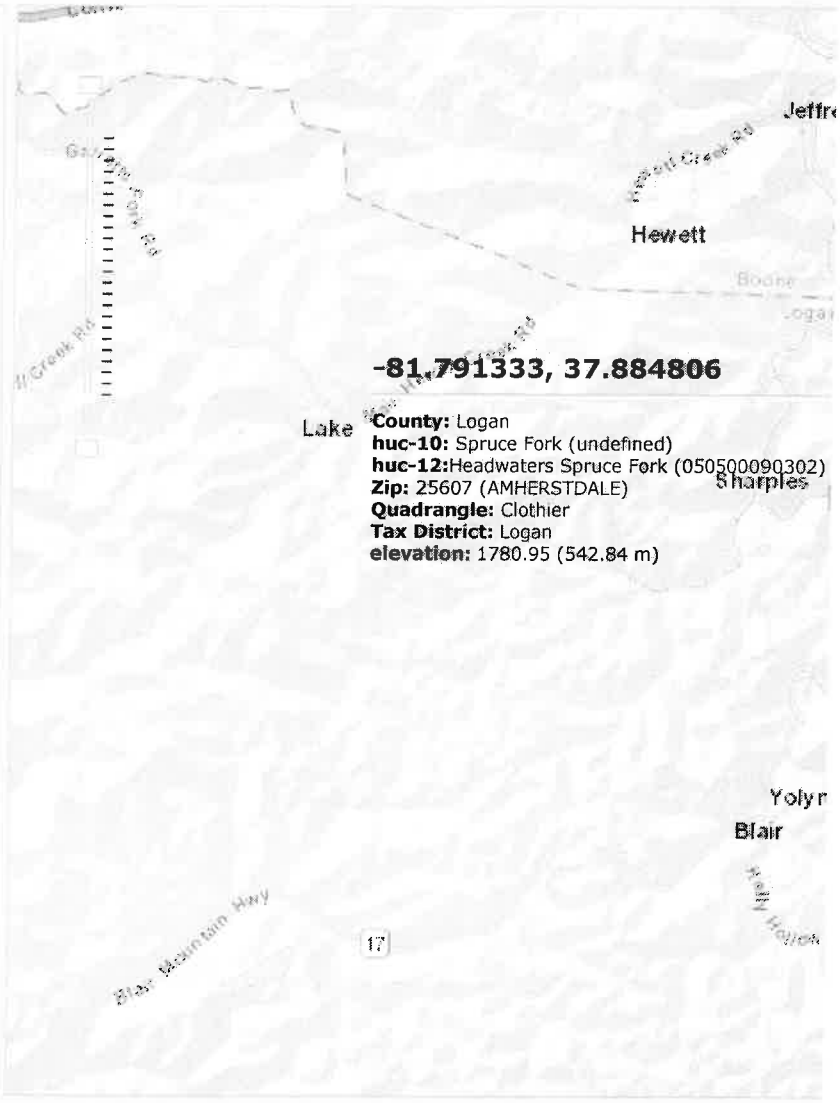
Convert

WV State Plane (feet)

Coordinates: 1306998.71 E -215657.92 N

Datum: NAD27 NAD83 Zone: North

Convert



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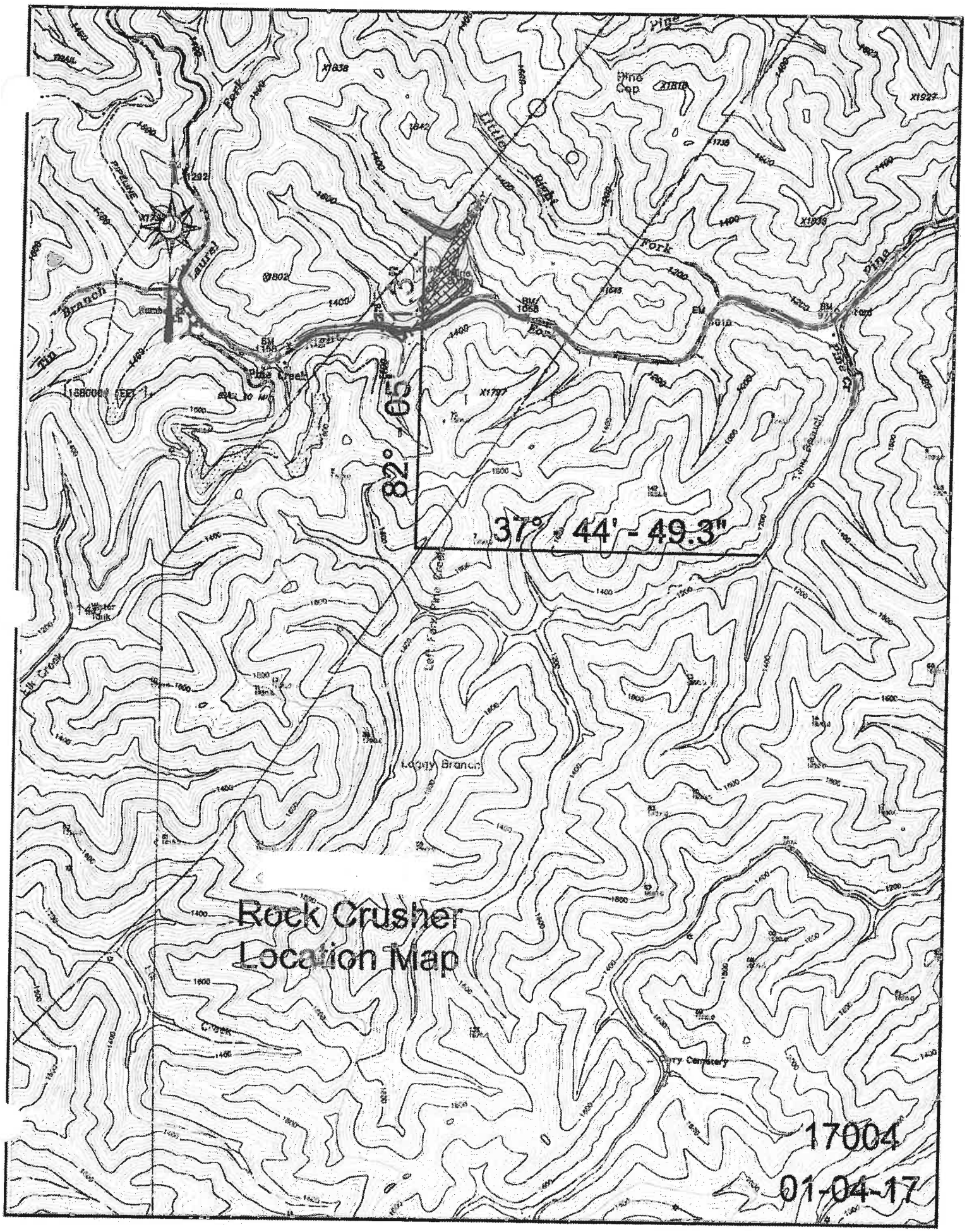

82° - 05'
37° - 44' - 49.3"
Rock Crusher
Location Map
17004
01-04-17

Lon/Lat

Longitude: - 82 d 5 m 1.30 s

atitude: + 37 d 44 m 49.30 s

DD: -82.083694 37.747028

Datum: NAD27 NAD83

Convert

UTM

Coordinates: 404527.17 E 4178300.60 N

Datum: NAD27 NAD83 Zone: 17

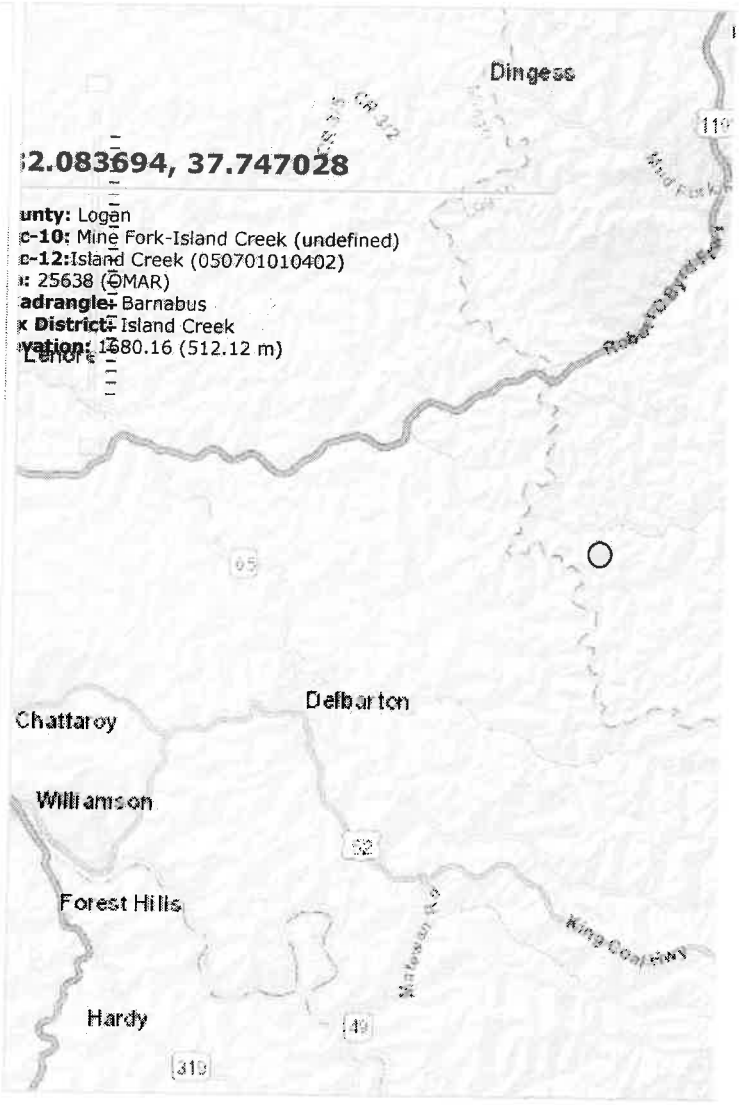
Convert

WV State Plane (feet)

Coordinates: 1221173.49 E -263540.57 N

Datum: NAD27 NAD83 Zone: North

Convert



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ENGINE DATA SHEET

Source Identification Number[1]		E-1					
Engine Manufacturer and Model		Scania/CAT C9					
Manufacturer's Rated bhp/rpm		1800					
Source Status[2]		NS					
Date Installed/Modified/Removed (Month/Year)[3]		2014					
Engine Manufactured/Reconstruction Date[4]		2014					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No)[5]		Yes					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No)[6]		No					
Engine, Fuel and Combustion Data	Engine Type	4 Stroke					
	APCD Type[8]	SCR					
	Fuel Type[9]	Diesel					
	H_2S (gr/100 scf)	N/A					
	Operating bhp/rpm	N/A					
	BSFC (Btu/bhp-hr)	N/A					
	Fuel throughput (ft^3/hr)	15.6					
	Fuel throughput ($MMft^3$/yr)	24,960 GPY					
	Operation (hrs/yr)	1600					
Reference[10]	Potential Emissions[11]	lbs/hr	tons/yr				
	NO_X	8.5250	6.820				
	CO	1.8370	1.470				
	VOC	0.6793	0.543				
	SO_2	0.5638	0.451				
	PM_{10}	0.6050	0.484				
	Formaldehyde	0.00221	0.001151				

1. Enter the appropriate Source Identification Number for each reciprocating internal combustion compressor/generator engine located at the facility. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Emergency Generator engines should be designated EG-1, EG-2, EG-3 etc. If more than three (3) engines exist, please use additional sheets.

2. Enter the Source Status using the following codes:

   NS Construction of New Source (installation) ES Existing Source

MS Modification of Existing Source RS Removal of Source

3. Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.

4. Enter the date that the engine was manufactured, modified or reconstructed.

5. Is the engine a certified stationary compression ignition internal combustion engine according to 40CFR60 Subpart IIII. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4210 as appropriate.

   Provide a manufacturer's data sheet for all engines being registered.

6. Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart JJJJ. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4243a(2)(i) through (iii), as appropriate.

   Provide a manufacturer's data sheet for all engines being registered.

7. Enter the Engine Type designation(s) using the following codes:

   LB2S Lean Burn Two Stroke
   LB4S Lean Burn Four Stroke
   RB4S Rich Burn Four Stroke

8. Enter the Air Pollution Control Device (APCD) type designation(s) using the following codes:

A/F	Air/Fuel Ratio	IR	Ignition Retard
HEIS	High Energy Ignition System	SIPC	Screw-in Precombustion Chambers
PSC	Prestratified Charge	LEC	Low Emission Combustion
NSCR	Rich Burn & Non-Selective Catalytic Reduction	SCR	Lean Burn & Selective Catalytic Reduction

9. Enter the Fuel Type using the following codes:

PQ	Pipeline Quality Natural Gas	RG	Raw Natural Gas
2FO	#2 Fuel Oil	LPG	Liquid Propane Gas

10. Enter the Potential Emissions Data Reference designation using the following codes. Attach all referenced data to this *Compressor/Generator Data Sheet(s)*.

MD	Manufacturer's Data	AP	AP-42	
GR	GRI-HAPCalc™	OT	Other _____	(please list)

11. Enter each engine's Potential to Emit (PTE) for the listed regulated pollutants in pounds per hour and tons per year. PTE shall be calculated at manufacturer's rated brake horsepower and may reflect reduction efficiencies of listed Air Pollution Control Devices. Emergency generator engines may use 500 hours of operation when calculating PTE. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet*.

STORAGE TANK DATA SHEET

Source ID #[1]	Status[2]	Content[3]	Volume[4]	Dia[5]	Throughput[6]	Orientation[7]	Liquid Height[8]
T1	Exist	Diesel	1,000	4	8,000	HORZ	

1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the facility. Tanks should be designated T01, T02, T03, etc.
2. Enter storage tank Status using the following:

   EXIST Existing Equipment NEW Installation of New Equipment
   REM Equipment Removed
3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
4. Enter storage tank volume in gallons.
5. Enter storage tank diameter in feet.
6. Enter storage tank throughput in gallons per year.
7. Enter storage tank orientation using the following:

   VERT Vertical Tank HORZ Horizontal Tank
8. Enter storage tank average liquid height in feet.

EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS

						Registration Number (Agency Use) Pending				
	Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)				
Source ID No.	NO_X	CO	VOC	SO_2	PM_{10}	NO_X	CO	VOC	SO_2	PM_{10}
Scania DC09	8.5250	1.8370	0.6793	0.5638	0.6050	6.820	1.470	0.543	0.451	0.484
Total Uncontrolled	8.5250	1.8370	0.6793	0.5638	0.6050	6.820	1.470	0.543	0.451	0.484

Source ID No.	Benzene	Acetaldehyde	Toluene	Xylenes	Formalde-hyde	Benzene	Acetaldehyde	Toluene	Xylenes	Formalde-hyde
Scania DC09	0.00196	0.00161	0.00086	0.0006	0.00248	0.001571	0.001291	0.000689	0.00048	0.001987
						Acrolein	Naphthalene			
						0.000156	0.000143			

HAP TOTALS: 0.00798 lb/hour 0.006381 TPY

CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number[1]		CR-01					
Type of Crusher or Screen[2]		JAW					
Date of Manufacture[3]		2014					
Maximum Throughput[4]	tons/hour	400					
	tons/year	640,000					
Material sized from/to:[5]		6 x 0					
Average Moisture Content (%)[6]		3					
Control Device ID Number[7]		FW					
Baghouse Stack Parameters[8]	height (ft)	N/A					
	diameter (ft)						
	volume (ACFM)						
	exit temp (°F)						
	UTM Coordinates						
Maximum Operating Schedule[9]	hours/day	8					
	days/year	200					
	hours/year	1600					
Percentage of Operation[10]	January-March	25					
	April-June	25					
	July-September	25					
	Oct-December	25					

1. Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.
2. Describe types of crushers and screens using the following codes:

HM	Hammermill	SS	Stationary Screen
DR	Double Roll Crusher	SD	Single Deck Screen
BM	Ball Mill	DD	Double-Deck Screen
RB	Rotary Breaker	TD	Triple Deck Screen
JC	Jaw Crusher	OT	Other
GC	Gyratory Crusher		
OT	Other - Quadroll		

3. Enter the date that each crusher and screen was manufactured.
4. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
5. Describe the nominal material size reduction (e.g. +2"/ -_").
6. Enter the average percent moisture content of the material processed.
7. Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A - *Control Device Listing* and *Control Device Identification Number Instructions* in the *Reference Document* for Control Device ID prefixes and numbering.
8. Enter the appropriate stack parameters if a baghouse control device is used.
9. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.
10. Enter the estimated percentage of operation throughout the year for each crusher and screen.

CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number[1]		SS-01					
Type of Crusher or Screen[2]		DD					
Date of Manufacture[3]		2014					
Maximum Throughput[4]	tons/hour	400					
	tons/year	3,504,000					
Material sized from/to:[5]		6 x 0					
Average Moisture Content (%)[6]		3					
Control Device ID Number[7]		PW					
Baghouse Stack Parameters[8]	height (ft)	N/A					
	diameter (ft)						
	volume (ACFM)						
	exit temp (°F)						
	UTM Coordinates						
Maximum Operating Schedule[9]	hours/day	8					
	days/year	200					
	hours/year	1600					
Percentage of Operation[10]	January-March	25					
	April-June	25					
	July-September	25					
	Oct-December	25					

1. Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.
2. Describe types of crushers and screens using the following codes:

HM	Hammermill	SS	Stationary Screen
DR	Double Roll Crusher	SD	Single Deck Screen
BM	Ball Mill	DD	Double-Deck Screen
RB	Rotary Breaker	TD	Triple Deck Screen
JC	Jaw Crusher	OT	Other
GC	Gyratory Crusher		
OT	Other - Quadroll		

3. Enter the date that each crusher and screen was manufactured.
4. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
5. Describe the nominal material size reduction (e.g. +2"/ -_").
6. Enter the average percent moisture content of the material processed.
7. Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A - *Control Device Listing* and *Control Device Identification Number Instructions* in the *Reference Document* for Control Device ID prefixes and numbering.
8. Enter the appropriate stack parameters if a baghouse control device is used.
9. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.
10. Enter the estimated percentage of operation throughout the year for each crusher and screen.

CONVEYING AFFECTED SOURCE SHEET

Source Identification Number[1]	Date of Manufacture[2]	Type of Material Handled[3]	Size of Material Handled[4]	Maximum Material Transfer Rate[5]		Average Moisture Content (%)[6]	Control Device[7]
				tons/hour	tons/year		
BC-01	**2014**	**Rock**	**6x0**	**400**	**640,000**	**3**	**None**
BC-02	**2014**	**Rock**	**-2x0**	**400**	**640,000**	**3**	**None**
BC-03	**2014**	**Rock**	**2x0**	**400**	**640,000**	**3**	**None**
BC-04	**2014**	**Rock**	**+3**	**400**	**640,000**	**3**	**None**
BC05	**2014**	**Rock**	**+3**	**400**	**640,000**	**3**	**None**
BC-06	**2014**	**Rock**	**-2x0**	**400**	**640,000**	**3**	**None**
BC-07	**2014**	**Rock**	**2x0**	**400**	**640,000**	**3**	**None**
BC-08	**2014**	**Rock**	**3x0**	**400**	**640,000**	**3**	**None**

STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number[1]	**BS-01**	**BS-02**			
Type of Material Stored[2]	**Rock**	**Rock**			
Average Moisture Content (%)[3]	**3**	**3**			
Maximum Yearly Storage Throughput (tons)[4]	**640,000**	**640,000**			
Maximum Storage Capacity (tons)[5]	**10**	**10**			
Maximum Base Area (ft^2)[6]					
Maximum Pile Height (ft)[7]					
Method of Material Load-in[8]	**Endloader**	**Endloader**			
Load-in Control Device Identification Number[9]	**UD-PW**	**UD-PW**			
Storage Control Device Identification Number[9]	**PW**	**PW**			
Method of Material Load-out[8]	**SS**	**SS**			
Load-out Control Device Identification Number[9]	**TC-PE**	**TC-PE**			

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.
   - BS Bin or Storage Silo (full enclosure)
   - OS Open Stockpile
   - SF Stockpiles with wind fences
   - E3 Enclosure (three sided enclosure)
   - SB Storage Building (full enclosure)
   - OT Other
2. Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).
3. Enter the average percent moisture content of the stored material.
4. Enter the maximum yearly storage throughput for each storage activity.
5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
6. For stockpiles, enter the maximum stockpile base area.
7. For stockpiles, enter the maximum stockpile height.
8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:
   - CS Clamshell
   - FC Fixed Height Chute from Bins
   - FE Front Endloader
   - MC Mobile Conveyor/Stacker
   - UC Under-pile or Under-Bin Reclaim Conveyor
   - RC Rake or Bucket Reclaim Conveyor
   - SS Stationary Conveyor/Stacker
   - ST Stacking Tube
   - TC Telescoping Chute from Bins
   - TD Truck Dump
   - PC Pneumatic Conveyor/Stacker
   - OT Other

STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number[1]	OS-1	OS-2	OS-3	OS-4	OS-5
Type of Material Stored[2]	Rock	Rock	Rock	Rock	Rock
Average Moisture Content (%)[3]	3	3	3	3	3
Maximum Yearly Storage Throughput (tons)[4]	640,000	640,000	640,000	640,000	640,000
Maximum Storage Capacity (tons)[5]	5,000	5,000	5,000	5,000	5,000
Maximum Base Area (ft^2)[6]	8,869	8,869	8,869	8,869	8,869
Maximum Pile Height (ft)[7]	25'	25'	25'	25'	25'
Method of Material Load-in[8]	SS	SS	SS	SS	SS
Load-in Control Device Identification Number[9]	TC-MDH	TC-MDH	TC-MDH	TC-MDH	TC-MDH
Storage Control Device Identification Number[9]	SW-WS	SW-WS	SW-WS	SW-WS	SW-WS
Method of Material Load-out[8]	FE	FE	FE	FE	FE
Load-out Control Device Identification Number[9]	LO-MDH	LO-MDH	LO-MDH	LO-MDH	LO-MDH

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.
   - BS Bin or Storage Silo (full enclosure)
   - OS Open Stockpile
   - SF Stockpiles with wind fences
   - E3 Enclosure (three sided enclosure)
   - SB Storage Building (full enclosure)
   - OT Other
2. Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).
3. Enter the average percent moisture content of the stored material.
4. Enter the maximum yearly storage throughput for each storage activity.
5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
6. For stockpiles, enter the maximum stockpile base area.
7. For stockpiles, enter the maximum stockpile height.
8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:
   - CS Clamshell
   - FC Fixed Height Chute from Bins
   - FE Front Endloader
   - MC Mobile Conveyor/Stacker
   - UC Under-pile or Under-Bin Reclaim Conveyor
   - RC Rake or Bucket Reclaim Conveyor
   - SS Stationary Conveyor/Stacker
   - ST Stacking Tube
   - TC Telescoping Chute from Bins
   - TD Truck Dump
   - PC Pneumatic Conveyor/Stacker
   - OT Other

ATTACHMENT H

BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET

Not applicable for this facility

Complete a Baghouse Air Pollution Control Device Sheet for each baghouse control device.

1. Baghouse Control Device Identification Number:
2. Manufacturer's name and model identification:
3. Number of compartments in baghouse:
4. Number of compartments online during normal operation and conditions:
5. Gas flow rate into baghouse: _____ ACFM @ _____ °F and _____ PSIA
6. Total cloth area: _____ ft^2
7. Operating air to cloth ratio: _____ ft/min
8. Filter media type: _____
9. Stabilized static pressure drop across baghouse: _____ inches H_2O
10. Baghouse operation is:

    ☐ Continuous ☐ Automatic ☐ Intermittent

11. Method used to clean bags:

    ☐ Shaker ☐ Pulse jet ☐ Reverse jet ☐ Other

12. Emission rate of particulate matter entering and exiting baghouse at maximum design operating conditions:

    Entering baghouse:_____ lb/hr and _____ grains/ACF

    Exiting baghouse: _____ lb/hr and _____ grains/ACF

13. Guaranteed minimum baghouse collection efficiency: _____ %
14. Provide a written description of the capture system (e.g. hooding and ductwork arrangement), size of ductwork and hoods and air volume, capacity and operating horsepower of fan:
15. Describe the method of disposal for the collected material:

    _____

ALLEY TRUCKING
Rock Crusher - Scania DC09 Engine **ID: Pending**

TERIA POLLUTANTS

AP-42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-1 for Diesel Fuel

	202	**kW**
Diesel Fuel Engine	**275**	**hp**
Max. Hours of Operation (8 hrs/day, 5 days/week, 40 weeks/year)	**1600**	**hrs/year**
Heating Value for diesel	**128700**	**Btu/gal**

E (hourly) = Emission Factor (lb/hp-hr) * Horse Power (hp)
E (annual) = Emission Factor (lb/hp-hr) * Horse Power (hp) * Maximum Hours of Operation * 1 ton per 2000 lb

Pollutant		Emission Factor (lb/hp-hr)	Emission Factor (lb/MMBtu)	Rating	lb/hour	TPY
NOx	AP42	0.03100	4.41	D	8.5250	6.820
CO	AP42	0.00668	0.95	D	1.8370	1.470
SOx	AP42	0.00205	0.29	D	0.5638	0.451
PM/PM10	AP42	0.00220	0.31	D	0.6050	0.484
VOC	AP42	0.00247	0.35	D	0.6793	0.543

HAZARDOUS AIR POLLUTANTS

42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-2
45CSR30 Table 45-30A Hazardous Air Pollutants

Diesel Fuel Engine	**275**	**hp**
aximum Hours of Operation (8 hrs/day, 5 days/week, 40 weeks/year)	**1600**	**hours/year**
cation, based on EPA WebFIRE/AP-42 3.4-1 assumptions on diesel	**19000**	**Btu/lb**
	7.1	**lb/gal**
Heating Value for diesel	**134900**	**BTU/US gal**
Maximum diesel usage at 1800 rpm	**15.6**	**gal/hour**

see CAT Fuel Consumption based on KW

E (hourly) = Emission Factor (lb/hp-hr) * Horse Power (hp)
E (annual) = Emission Factor (lb/hp-hr) * Horse Power (hp) * Maximum Hours of Operation * 1 ton per 2000 lb

CAS NO.		Emission Factor (lb/MMBtu)	Rating	lb/hour	TPY
71-43-2	Benzene	0.000933	E	0.00196	0.001571
108-88-3	Toluene	0.000409	E	0.00086	0.000689
	Xylenes	0.000285	E	0.0006	0.00048
	1,3-Butadiene	0.0000391	E	8.2E-05	6.58E-05
50-00-0	Formaldehyde	0.00118	E	0.00248	0.001987
	Acetaldehyde	0.000767	E	0.00161	0.001291
	Acrolein	0.0000925	E	0.00019	0.000156
91-20-3	Naphthalene	0.0000848	E	0.00018	0.000143
	Burning diesel fuel:		***Total HAPs***	**0.00798** lb/hour	**0.006381** TPY

INPUTS

Include all information for each emission source and transfer point as listed in the permit application.

Name of applicant: Alley Trucking
Name of plant: Rock Crusher
December 2016

1. CRUSHING AND SCREENING (including all primary and secondary crushers and screens)

1a. PRIMARY CRUSHING

Primary Crusher ID Number	Description	Maximum Material Processing Capacity		Control Device ID Number	Control Efficiency %
		TPH	TPY		
CR-01	CRUSHER	400	640,000	FW	90

1b. SECONDARY AND TERTIARY CRUSHING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity		Control Device ID Number	Control Efficiency %
		TPH	TPY		

1c. SCREENING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity		Control Device ID Number	Control Efficiency %
		TPH	TPY		
SS-01	Power Screen	400	640,000	PW	80

2. TRANSFER POINTS (including all conveyor transfer points, equipment transfer points etc.)

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.0029	0.0014
U =	Mean Wind Speed (mph)	7	

Transfer Point ID No.	Transfer Point Description Include ID Numbers of all conveyors, crushers, screens, stockpiles, etc. involved	Material Moisture Content %	Maximum Transfer Rate TPH	Maximum Transfer Rate TPY	Control Device ID Number	Control Efficiency %
TP-01	Overburden Area to BS-01	3	400	640,000	UD-MDH	0
TP-02	BS-01 to BC-01	3	400	640,000	TC-PE	50
TP-03	BC-01 to SS-01	3	400	640,000	TC-PW	80
TP-04	SS-01 to BC-02	3	400	640,000	TC-FE	80
TP-05	BC-02 to OS-01	3	400	640,000	TC-MDH	0
TP-06	OS-01 to Truck	3	400	640,000	LO-MDH	0
TP-07	SS-01 to BC-03	3	400	640,000	TC-FE	80
TP-08	BC-03 to OS-02	3	400	640,000	TC-MDH	0
TP-09	OS-02 to Truck	3	400	640,000	LO-MDH	0
TP-10	SS-01 to BC-04	3	400	640,000	TC-FE	80
TP-11	BC-04 to BS-02	3	400	640,000	TC-PW	80
TP-12	BS-02 to BC-05	3	400	640,000	TC-PE	50
TP-13	BC-05 to CR-01	3	400	640,000	TC-FE	80
TP-14	CR-01 to BC-06	3	400	640,000	TC-FE	80
TP-15	BC-06 to OS-03	3	400	640,000	TC-MDH	0
TP-16	OS-03 to Truck	3	400	640,000	LO-MDH	0
TP-17	CR-01 to BC-07	3	400	640,000	TC-FE	80
TP-18	BC-07 to OS-04	3	400	640,000	TC-MDH	0
TP-19	OS-04 to Truck	3	400	640,000	LO-MDH	0
TP-20	CR-01 to BC-08	3	400	640,000	TC-FE	80
TP-21	BC-08 to OS-05	3	400	640,000	TC-MDH	0
TP-22	OS-05 to Truck	3	400	640,000	LO-MDH	0

3. WIND EROSION OF STOCKPILES (including all stockpiles of raw coal, clean coal, coal refuse, etc.)

p =	number of days per year with precipitation >0.01 inch	157
f =	percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height	20

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
OS-01	1" stone	10	8,869	SW-WS	75
OS-02	2" Stone	10	8,869	SW-WS	75
OS-03	1" stone	10	8,869	SW-WS	75
OS-04	2" Stone	10	8,869	SW-WS	75
OS-05	3" stone	10	8,869	SW-WS	75

4. UNPAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

s =	silt content of road surface material (%)	10
p =	number of days per year with precipitation >0.01 inch	157
M_{dry} =	surface material moisture content (%) - dry conditions	0.2

Item Number	Description	Number of wheels	Mean Vehicle Weight(tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1									
2	Rock Out 640000	10	25	15	1	16	25,600	HR-WS	75
3	Endloader 640000	4	20	5	0.01	20	32,000	HR-WS	75
4									
5									
6									
7									
8									

5. INDUSTRIAL PAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

sL =	road surface silt loading, (g/m^2)	70
P =	number of days per year with precipitation >0.01 inch	157

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1							
2							
3							
4							
5							
6							
7							
8							

EMISSIONS SUMMARY

Name of applicant: Alley Trucking
Name of plant: Rock Crusher

Particulate Matter or PM (for 45CSR14 Major Source Determination)

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.57	2.48	0.14	0.62
Unpaved Haulroad Emissions	230.03	184.02	57.51	46.01
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	230.60	186.51	57.65	46.63
POINT SOURCE EMISSIONS				
Equipment Emissions	12.88	10.30	2.55	2.04
Transfer Point Emissions	0.07	0.06	0.04	0.04
Point Source Emissions Total*	12.95	10.36	2.59	2.07
*Note: Point Source Total Controlled PM TPY emissions is used for 45CSR14 Major Source determination (see below)				
Facility Emissions Total	243.55	196.87	60.24	48.70

***Facility Potential to Emit (PTE) (Baseline Emissions) = 2.07**

(Based on Point Source Total controlled PM TPY emissions from above) ENTER ON LINE 26 OF APPLICATION

Particulate Matter under 10 microns, or PM-10 (for 45CSR30 Major Source Determination)

	Uncontrolled PM-10		Controlled PM-10	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.27	1.17	0.07	0.29
Unpaved Haulroad Emissions	48.39	38.71	12.10	9.68
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	48.66	39.88	12.16	9.97
POINT SOURCE EMISSIONS				
Equipment Emissions	6.13	4.91	1.21	0.97
Transfer Point Emissions	0.03	0.03	0.02	0.02
Point Source Emissions Total*	6.17	4.93	1.24	0.99
*Note: Point Source Total Controlled PM-10 TPY emissions is used for 45CSR30 Major Source determination				
Facility Emissions Total	54.83	44.82	13.40	10.96

1. Emissions From CRUSHING AND SCREENING

1a. Primary Crushing

Primary Crusher ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
CR-01	0.28	0.22	0.03	0.02	0.13	0.11	0.01	0.01
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.28	0.22	0.03	0.02	0.13	0.11	0.01	0.01

1b. Secondary and Tertiary Crushing

Secondary & Tertiary Crusher ID	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1c. Screening

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
SS-01	12.60	10.08	2.52	2.02	6.00	4.80	1.20	0.96
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	12.60	10.08	2.52	2.02	6.00	4.80	1.20	0.96

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	12.88	10.30	2.55	2.04	6.13	4.91	1.21	0.97

1. Emissions From CRUSHING AND SCREENING (Continued)

EMISSION FACTORS

source: AP42, Fifth Edition, Revised 01/95

(lb/ton of material throughput)

PM	
Primary Crushing	0.0007
Tertiary Crushing	0.00504
Screening	0.0315

PM-10	
Primary Crushing	0.000333
Tertiary Crushing	0.0024
Screening	0.015

2. *Emissions From TRANSFER POINTS*

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TP-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2. Emissions From TRANSFER POINTS (continued)

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.07	0.06	0.04	0.04	0.03	0.03	0.02	0.02

Source:
AP-42 Fifth Edition
13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

E = k*(0.0032) * [(U/5)^1.3]/[(M/2)^1.4] = pounds/ton

Where:		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.0029	0.0014
U =	Mean Wind Speed (mph)		
M =	Material Moisture Content (%)		

Assumptions:

k - Particle size multiplier
For PM (< or equal to 30um) k = 0.0029
For PM-10 (< or equal to 10um) k = 0.0014

For PM E(M) = 1.437E-05 *[1/((M/2)^1.4)] = pounds/ton

For PM-10 E(M) = 6.938E-06 *[1/((M/2)^1.4)] = pounds/ton

For lb/hr [lb/ton]*[ton/hr] = [lb/hr]

For Tons/year [lb/ton]*[ton/yr]*[ton/2000lb] = [ton/yr]

3. *Emissions From WIND EROSION OF STOCKPILES*

Stockpile ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
OS-01	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06
OS-02	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06
OS-03	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06
OS-04	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06
OS-05	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.57	2.48	0.14	0.62	0.27	1.17	0.07	0.29

Source:
Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

E = 1.7*[s/1.5]*[(365-p)/235]*[f/15] = (lb/day/acre)

Where:

s =	silt content of material
p =	number of days with >0.01 inch of precipitation per year
f =	percentage of time that the unobstructed wind speed
	exceeds 12 mph at the mean pile height

For PM E(s)= 1.3374941 * s = lb/day/acre

For PM-10 E(s)= 0.6286222 * s = lb/day/acre

For lb/hr [lb/day/acre]*[day/24hr]*[base area of pile (acres)] = lb/hr

For Ton/yr [lb/day/acre]*[365day/yr]*[Ton/2000lb]*[base area of pile (acres)] = Ton/yr

4. Emissions From UNPAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	227.49	181.99	56.87	45.50	47.85	38.28	11.96	9.57
3	2.54	2.03	0.64	0.51	0.55	0.44	0.14	0.11
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	230.03	184.02	57.51	46.01	48.39	38.71	12.10	9.68

Source:
AP-42 9/98 Edition
13.2.2 Unpaved Roads

Emission Estimate For Unpaved Haulroads at Industrial Sites (equation 1)

$E = [(k*(s/12)^a * (W/3)^b) / ((M_{dry}/0.2)^c)] * [(365-p)/365)]$ = lb / Vehicle Mile Traveled (VMT)

Where:

		PM	PM-10
k =	particle size multiplier	10.00	2.60
a =	empirical constant	0.8	0.8
b =	empirical constant	0.5	0.4
c =	empirical constant	0.4	0.3
M_{dry} =	surface material moisture content (%) - dry conditions	0.2	
p =	number of days with at least 0.01 inches of precipitation	157	
s =	silt content of road surface material (%)	10	
W =	Mean vehicle weight (tons)		

5. Emissions From INDUSTRIAL PAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source:
AP-42 10/01 Edition
13.2.1 PAVED ROADS

Emission Estimate For Paved Haulroads

E = k * [sL/2]^0.65 * [W/3]^1.5 * [1 - (P / (2*N)] = lb / Vehicle Mile Traveled (VMT)

Where:

		PM	PM-10
k =	particle size multiplier	0.082	0.016
sL =	road surface silt loading, (g/m^2)	70	
P =	number of days per year with precipitation >0.01 inch	157	
N =	number of days in averaging period	365	
W =	average vehicle weight, (ton)		

Legal Advertisement

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Alley Trucking LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Registration for a Rock Crushing and Screening Plant System to be located on two area surface mines, located near Sharples and Holden in Logan County, West Virginia. The facility coordinates are as follows: Holden latitude 37.747028 and longitude –82.083694 Sharples latitude 37.884806 and longitude –81.791333.

The applicant estimates the potential to discharge the following Regulated Air Pollutants from the diesel combustion engine will be: criteria pollutants for the engine is estimated to be: NOx 6.82 tons per year, CO 1.47 tons per year, VOC 0.543 tons per year, SOx 0.451 tons per year and PM10 0.484 tons per year. The potential to emit hazardous pollutants from the engine is estimated to be: Benzene 0.001571 tons per year, Toluene 0.000689 tons per year, Xylene 0.00048 tons per year, Acetaldehyde 0.0001291 tons per year, Acrolein 0.000156 tons per year, Naphthalene 0.000143 tons per year and Formaldehyde 0.001987 tons per year.

The applicant estimates the potential to discharge the following Regulated Air Pollutants associated with the operation of the crushing/screening plant will be: facility particulate matter potential to emit baseline emissions of 2 tons per year, particulate matter less than 10 microns emissions total of 1 tons per year and particulate matter facility emissions total of 49 tons per year.

Startup of operation is planned to begin upon permit approval. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the 10th day of January 2017

By: Alley Trucking LLC
James Alley
Managing Member
123 Little Mud Lick
Belfry, KY 41514

ATTACHMENT K

ELECTRONIC SUBMITTAL DISC LOCATED IN ORIGINAL APPLICATION

SECTION IV. CERTIFICATION OF INFORMATION

This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant.

FOR A CORPORATION (domestic or foreign)

☐ I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation

FOR A PARTNERSHIP

☐ I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

■ I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

☐ I certify that I am the President or a member of the Board of Directors

FOR A JOINT VENTURE

☐ I certify that I am the President, General Partner or General Manager

FOR A SOLE PROPRIETORSHIP

☐ I certify that I am the Owner and Proprietor

☐ *is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Chief of the Office of Air Quality immediately, and/or,*

I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible

Signature _____
(please use blue ink) Responsible Official Date

Name & Title JAMES ALLEY, MANAGING MEMBER
(please print or type)

Signature James Alley
(please use blue ink) Authorized Representative (if applicable) Date

Applicant's Name: ALLEY TRUCKING LLC

Phone: 606-625-0656

Email: jimmyalley@suddenlink.net

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

PLEASE CHECK ALL ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

Please See the appropriate reference document for an explanation of the attachments listed below.

- ■ **ATTACHMENT A : CURRENT BUSINESS CERTIFICATE**
- ■ **ATTACHMENT B: PROCESS DESCRIPTION**
- ■ **ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS**
- ■ **ATTACHMENT D: PROCESS FLOW DIAGRAM**
- ■ **ATTACHMENT E: PLOT PLAN**
- ■ **ATTACHMENT F: AREA MAP**
- ■ **ATTACHMENT G: AFFECTED SOURCE SHEETS**
- ■ **ATTACHMENT H: BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET**
- ■ **ATTACHMENT I: EMISSIONS CALCULATIONS**
- ■ **ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT**
- ■ **ATTACHMENT K: ELECTRONIC SUBMITTAL DISKETTE**
- ■ **CERTIFICATION OF INFORMATION**
- ■ **APPLICATION FEE**

PLEASE MAIL AN ORIGINAL AND TWO COPIES OF THE COMPLETE GENERAL PERMIT REGISTRATION APPLICATION WITH THE SIGNATURE(S) TO THE DAQ PERMITTING SECTION AT THE ADDRESS SHOWN ON THE FRONT PAGE. PLEASE DO NOT FAX PERMIT APPLICATIONS. FOR QUESTIONS REGARDING APPLICATIONS OR WEST VIRGINIA AIR POLLUTION RULES AND REGULATIONS PLEASE CALL (304) 926-3727.

TEREX | FINLAY

JAW CRUSHER

J-1160

WORKS FOR YOU.™

J-1160

The Terex Finlay J-1160 is a compact and aggressive tracked mobile primary jaw crusher. Incorporating the Terex Jaques JW40 jaw crusher a heavy duty VGF feeder and an integrated prescreen system the Terex Finlay J-1160 gives optimum production in quarrying, mining, demolition and recycling applications.

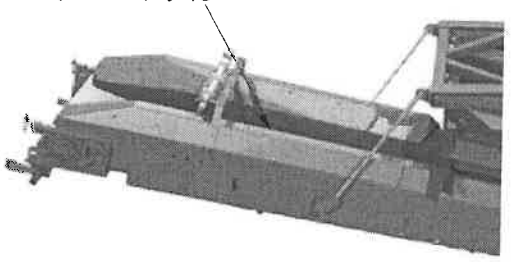
Its compact size, quick set up times, ease of transport and user friendly operational features make the Finlay J-1160 ideal for all sized operators.

Platforms

- Galvanised catwalks and ladders for full maintenance and service access
- Catwalks on left hand side of the machine with access to both sides of the powerunit
- Compact folding for transport

Main Conveyor

- Belt Width: 900mm (36")
- Belt Spec: Plain
- Working Angle: 22°
- Speed: 110 m/min nominal
- Discharge Height: 3.3m (10' 10")
- Impact bars and wear resistant liners at feed point
- High spec scraper at head drum
- Dust suppression: fitted with hose and spraybars as standard (no pump supplied)
- Standard Stockpile capacity: 53.4m³ (70yd³)@40°



STANDARD FEATURES

ENGINE:

Tier 3 / Stage IIIA : Caterpillar C9 Tier 3 ACERT. 224kW (300hp)

Tier 4 / Stage IIIA Constant Speed: Scania DC09 251kW (341hp)

Tier 4F / Stage IV: Scania DC09 202kW (275hp)

JAW CHAMBER:

Jaques 1000mm x 660mm (40" x 26") single toggle jaw crusher

Hydrostatic drive and advanced electronic control system

Fully hydraulically adjustable closed side setting

Reversible operation for clearing blockages

S tooth liners - 18% Manganese as Standard

HOPPER/FEEDER:

Hopper Capacity: 5m³ (6.5yd³)

Heavy duty vibrating feeder

Grizzly feeder with integral pre-screen, standard 50mm spacing

Selectable discharge to by-pass conveyor or main conveyor

Mesh aperture on grizzly feeder: 30mm

MAIN CONVEYOR:

900mm wide main belt fitted with impact bars at feed point

High spec scraper at head drum

Piped for dust supression complete with spraybars

GENERAL:

Piped for overband magnet

Galvanised catwalk c/w handrail, kick board and access ladders

Heavy duty undercarriage unit with 400mm wide pads

Handheld track control set with connection lead

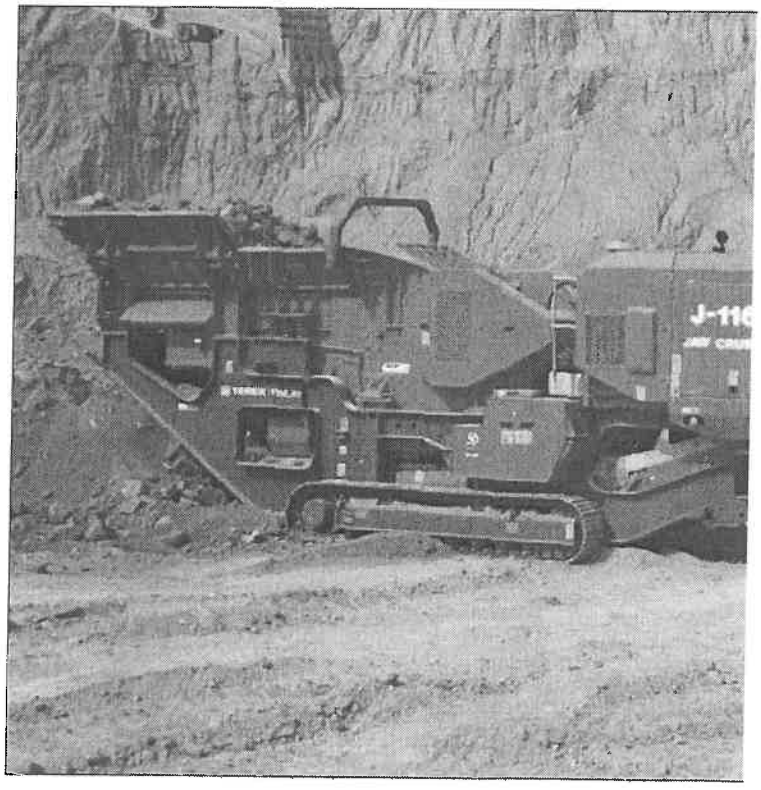
Single speed tracks with 'soft start'

Safety guards in compliance with machinery directive

Emergency stops

Features:

- The robust high performance hydrostatic driven single toggle jaw chamber provides high capacity with large reduction ratio's.
- Automatic variable speed VGF ensures continuous choke feeding of the crushing chamber for optimal productivity.
- High powered hydrostatic drive ensures precise chamber controls and reverse functionality for clearing blockages and assisting in demolition and recycling applications.
- Fully hydraulic adjustable closed side setting minimises downtime and offers quick adjustment.



TEREX | FINLAY

Jaw Chamber

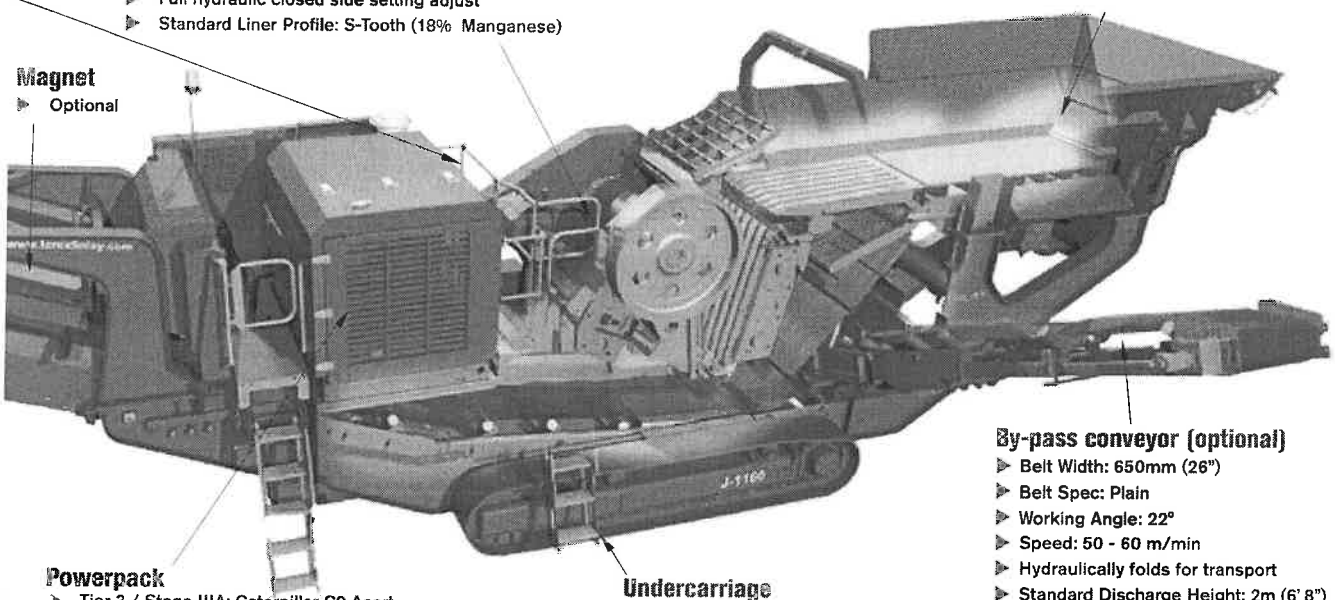
- Terex JW40 chamber single toggle jaw crusher
- Inlet width: 1000mm (40")
- Inlet gape: 660mm (26")
- Under jaw clearance: 465mm nominal
- Drive arrangement: Hydrostatic
- Maximum Closed Side Settings (CSS): 135mm (5 1/2 ")
- Minimum Closed Side Settings (CSS): 40mm (1 1/2 ") Demolition and Recycle applications. 75mm (3") 'Hard-Rock' Quarry application, 60mm (2 1/2") 'Soft-Rock' Quarry application
- Reverse action for clearing blockages
- Deflector plate - optional
- Full hydraulic closed side setting adjust
- Standard Liner Profile: S-Tooth (18% Manganese)

Hopper and Feeder

- Hopper capacity: 5m³ (6.5yd³)
- Feed height with standard hopper: 3.40m (11' 2")
- Feed height with standard hopper and extensions: 3.82m (12' 6")
- Material: 10mm wear resistant steel
- Feed width at rear with standard hopper: 1.73m (5' 8")
- Feed width at rear with standard hopper and extensions: 2.38m (7' 10")
- **Vibrating Grizzly feeder (VGF)**
- VGF grizzly aperture: 50mm (Option of 75mm)
- VGF wire mesh aperture: 30mm (Other options available upon request)
- VGF Speed range: variable, 450-850 rpm
- Hopper extensions (Optional): 8m³ (10.4yd³)
- Hopper Extensions hydraulic folding and manual locking

Magnet

- Optional



By-pass conveyor (optional)

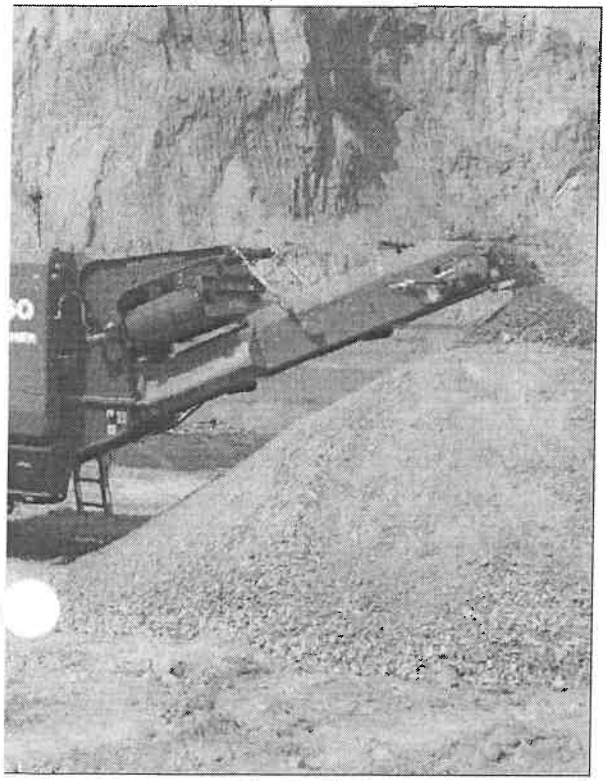
- Belt Width: 650mm (26")
- Belt Spec: Plain
- Working Angle: 22°
- Speed: 50 - 60 m/min
- Hydraulically folds for transport
- Standard Discharge Height: 2m (6' 8")
- Stockpile capacity: 11.4m³ (15.6yds³) @ 40°
- Optional extended discharge height: 2.8m (9' 2")
- Extended Stockpile capacity: 32.6m³ (42.6yds³) @ 40°

Powerpack

- Tier 3 / Stage IIIA: Caterpillar C9 Acert
  Engine Power: 224kW (300hp)
  Engine Speed: 2000 rpm
- Stage IIIA Constant Speed: Scania DC09
  Engine Power: 251kW (341hp)
  Engine Speed: 1800 rpm
- Tier 4F / Stage IV: Scania DC09
  Engine Power: 202kW (275hp)
  Engine Speed: 2000 rpm

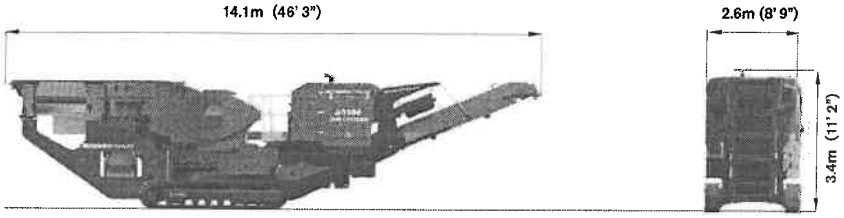
Undercarriage

- Shoe Width: 400mm (16")
- Sprocket Centres: 3.28m (10' 9")
- Single tracking speed with 'soft start'
- Speed: 1.1 km/h
- Gradeability: 25°

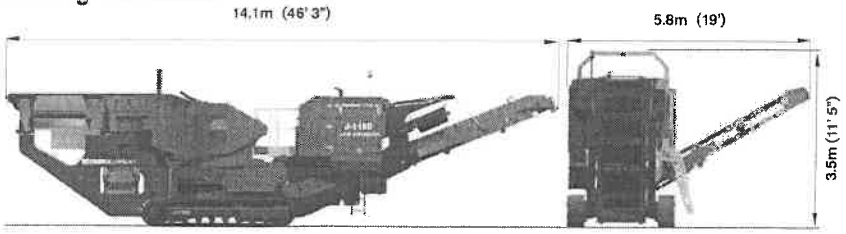


Machine Weight: 34,740kg (76,588lbs)
(without by-pass conveyor and single pole magnet options)
36,740kg (80,997lbs)

Transport Dimensions

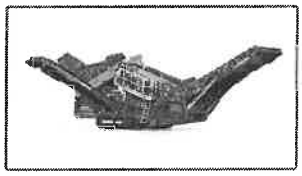


Working Dimensions



WORKS FOR YOU.™

Warrior Screen
Varrior 1400X



WARRIOR 1400X & 1400XE

The Powerscreen® Warrior 1400X is a flexible screening machine, aimed at operators who require a high performing, heavy duty, versatile machine that remains easy to transport. It offers improved performance, lower operating costs, and easier serviceability while building on the reliable foundation of our class-leading Warrior 1400 scalper.

It is designed with economy in mind, with reduced fuel consumption being achieved through a lower engine running speed of 1800rpm and enhanced hydraulics. A variety of media solutions mean that the Warrior 1400X is extremely efficient in scalping, screening and recycling applications and it can process mixed demolition waste including greenwaste, soil, concrete, wood and asphalt.

The Warrior 1400XE has been designed to meet the needs of customers for whom electricity is a preferred power source and opens up the possibility to run the machine indoors. It can be powered by electricity generated by other Powerscreen models for example the Premiertrak 600. The main benefit of the Warrior 1400XE is the variety of power options available. It can be self-powered with its own 72kVA generator, or be connected to a mains electricity supply for even further reductions in cost of ownership.

Features & benefits

Options

Specification

Brochures

- Output potential up to 500 tph (551 US tph)
- Heavy duty, incline belt feeder with rigid one piece hopper
- Heavy duty, adjustable angle, grease lubricated 2 bearing, 2 deck screen box
- Jack up screen facility to aid mesh changes
- Screen walkway & access steps
- Hydraulic folding conveyors with excellent stockpiling capacity
- Engine protection shutdown system
- Rapid set-up & shutdown time
- Two speed tracks
- Collection conveyor raise feature
- Reversible side conveyors
- Self-powered by the on-board Genset or by external mains supply (Warrior 1400XE)

Warrior 1400X & 1400XE Video Gallery

Animation - Powerscreen Warrior 1400X folding sequence

WARRIOR RANGE

Click on a model below for full details and specifications